

# **User's Guide** Compaq Evo Desktop D300v Series

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#### May 2002

This guide provides basic information about setting up and maintaining your computer.

Enhanced for accessibility

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User's Guide Compaq Evo Desktop D300v Series Fifth Edition May 2002 Document Part Number: 234630-005

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# **Quick Setup**

# **Step 1: Unpack the Computer**





**WARNING:** Misuse of your personal computer or failure to establish a safe and comfortable workstation may result in discomfort or serious injury. Refer to your Safety & Comfort Guide for more information on choosing a workspace and creating a safe and comfortable work environment. This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. For more information, refer to Appendix E of this guide. To reduce the risk of electrical shock, connect your personal computer only to a grounded (earthed) electrical outlet that is easily accessible at all times.

# **Step 2: Confirm the Voltage Setting**

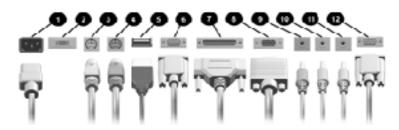




**CAUTION:** Ensure the voltage selection is compatible with your local power specifications. Failure to do so could result in damage to your computer.

# **Step 3: Connect External Devices**

Connect the monitor, mouse, keyboard, and network cables.



# Rear Panel Connectors (Arrangement of connectors may vary by model.)

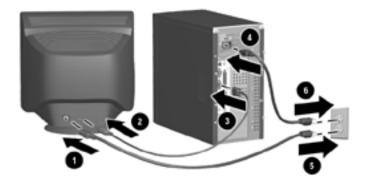
- Power Cord Connector
- Voltage Select Switch
- Mouse Connector
- 4 Keyboard Connector
- Universal Serial Bus (USB) Connectors
- 6 Serial Connector

- Parallel Port Connector
- Monitor Connector
- Meadphone/Line-out Connector
- Mario Audio/Line-in Connector
- Microphone connector
- Gameport connector



**CAUTION:** Do not add optional hardware devices to your personal computer until the operating system is successfully installed. Doing so may cause errors and may prevent the operating system from installing properly.

# **Step 4: Connect the Power Cords**



Connect the power cords as shown. Turn on the monitor, then turn on the personal computer.



**WARNING:** To reduce the risk of electric shock or damage to the equipment:

- Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
- Plug the power cord into a grounded (earthed) electrical outlet that is easily accessible at all times.
- Disconnect power from the personal computer by unplugging the power cord from either the electrical outlet or the personal computer.

# **Step 5: Front Panel Components**



#### Front Panel Components

- CD-ROM drive
- CD-ROM drive activity light
- Oiskette drive
- Diskette drive activity light
- **6** Diskette drive eject button

- **6** CD-ROM drive eject button
- **⑦** 5 1/4 inch expansion bay
- Oual-state power button
- Power-on light
- System activity light

# Step 6: Turning On the Personal Computer and Installing the Operating System

Press the power button to turn on the personal computer.

The first time you turn on the personal computer, the operating system is installed automatically. This process takes about 5 to 10 minutes, depending on which operating system is being installed. Carefully read and follow the instructions that appear on the screen to complete the installation.



**CAUTION:** Once the automatic installation has begun, DO NOT TURN OFF THE COMPUTER UNTIL THE PROCESS IS COMPLETE. Turning off the personal computer during the installation process might damage the software that runs the personal computer.

When the Welcome to Windows screen is displayed, the Windows installation process is complete.

# **Step 7: Turning Off the Personal Computer**

To properly turn off the personal computer, first exit the operating system. In Windows, click **Start > Shut Down.** In Windows operating systems, pressing the power button does not turn off the power, but causes the personal computer to enter a low-power state. This allows you to quickly power down, without closing applications, and to quickly return to the same operational state without any data loss.

# **Hardware Upgrades**

## Installation Sequence

It is very important that you follow this sequence of steps to ensure the proper installation of any optional equipment.

For more information about Setup Utility/Computer Setup, refer to the appropriate Setup Utility chapter in this guide.

1. If the computer is already on, turn it off and disconnect the power cord from the wall outlet.



**WARNING:** To reduce the risk of personal injury from electrical shock and/or hot surfaces, be sure to disconnect the power cord from the wall outlet, and allow the internal system components to cool before touching.



**WARNING:** To reduce the risk of electrical shock, fire, or damage to the equipment, do not plug telecommunications or telephone connectors into the network interface controller (NIC) receptacles.



**CAUTION:** Static electricity can damage the electronic components of the computer or optional equipment. Before beginning these procedures, ensure that you are discharged of static electricity by briefly touching a grounded metal object. See Appendix C, "Electrostatic Discharge," for more information.

- Open the computer by removing its access panels. See the procedures for removing the computer access panels later in this chapter.
- 3. Install any optional equipment. See the applicable sections of this guide or refer to the documentation provided with the optional equipment for instructions.

- 4. Replace the computer cover.
- 5. Turn on the monitor, computer, and any devices you want to test.

Reconfigure the computer, if necessary. For more information about Computer Setup/Setup Utility, refer to the appropriate Setup Utility chapter in this guide.

# **Removing the Access Panels**

- 1. Shut down the operating system properly, then turn off the computer and any external devices.
- 2. Disconnect the power cord from the power outlet, and disconnect any external devices.



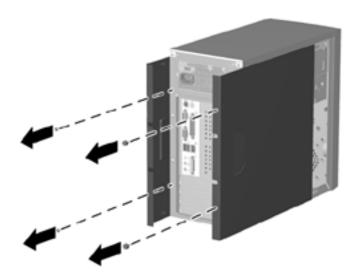
**CAUTION:** Before removing the computer access panel, ensure that the computer is turned off and that the power cord is disconnected from the electrical outlet.

3. Remove the two screws that secure the access panel to the computer chassis.



Remove the right access panel to upgrade memory or an expansion card. Remove the left access panel to upgrade a drive.

4. Slide the access panel back about 1 inch (2.5 cm), then lift it away from and off the unit.



#### Removing the Computer Access Panel

To replace the access panel, reverse steps 1-4.

## **Removing the Front Bezel**



Remove the front bezel to upgrade a drive.

1. Shut down the operating system properly, then turn off the computer and any external devices. Disconnect the power cord from the power outlet and disconnect any external devices.

- 2. Remove the computer access panels.
- 3. Squeeze the two circular tabs inside the front of the chassis **1**, then pull the front bezel away from the chassis to release it **2**.



#### Removing the Front Bezel



When replacing the front bezel, ensure that the side tabs are properly placed in the chassis before replacing the front bezel back.

# **Installing Additional Memory**

The memory sockets on the system board can be populated with industry-standard DIMMs. These memory module slots are populated with at least one preinstalled memory module. To achieve the maximum memory support, you may be required to replace the preinstalled DIMM with a higher capacity DIMM.

The DRAM controller supports a 64-bit memory data interface, optionally supporting 64-bit wide and 128-bit wide non-ECC DIMM modules. The supported DRAM type is Synchronous DRAM (SDRAM).

Two 168-pin DIMM socket sites (DIMM0 and DIMM1) operate at 3.3V. This allows system memory to be expanded from 32 MB to 512 MB of SDRAM.

The DRAM Controller uses the JEDEC standard Serial Presence Detect (SPD) mechanism to detect memory and array configurations; no jumper settings are required for the memory size. Memory is automatically detected by the system BIOS.

Rules for adding SDRAM memory modules to the DIMM memory array are as follows:

- The DIMM sockets support either single or double-sided "Unbuffered DIMM" modules.
- The installed DRAM type can be 32 MB, 64 MB, 128 MB, or 256 MB DIMMs.
- The installed DRAM can be either PC100 or PC133. The maximum operation speed of the memory array is 133 MHz.
- DIMM sockets can be populated in any order.
- The DRAM Timing register, which provides the DRAM speed grade control for the entire memory array, will be programmed to use the timings of the slowest DRAMs installed.

#### **Memory Module Installation**



**CAUTION:** Your memory module sockets have gold metal contacts. When upgrading your memory, it is important to use memory modules with gold metal contacts to prevent corrosion and/or oxidation resulting from having incompatible metals in contact with each other.



**CAUTION:** Static electricity can damage the electronic components of the computer or optional cards. Before beginning these procedures, ensure that you are discharged of static electricity by briefly touching a grounded metal object. Refer to Appendix C, "Electrostatic Discharge," for more information.



**CAUTION:** When handling a memory module, be careful not to touch any of the contacts. Doing so may damage the module.

- 1. Shut down the operating system properly, then turn off the computer and any external devices, then disconnect the power cord from the power outlet.
- 2. Remove the access panel and locate the memory module sockets.



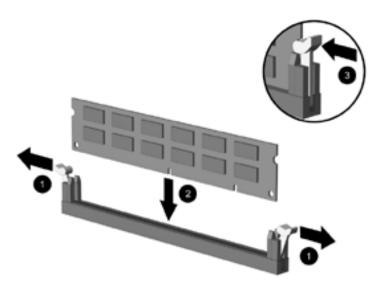
**WARNING:** To reduce risk of personal injury from hot surfaces, allow the internal system components to cool before touching.

3. Open both latches of the memory module socket **①**, and insert the memory module into the socket **②**.

Begin by installing a module into the socket nearest the preinstalled module, and install the modules following the numerical order of the sockets.

A memory module can be installed in only one way. Match the notch on the module with the tab on the memory socket. Push the module down into the socket, ensuring that the module is fully inserted and properly seated.

4. Close both latches of the memory module socket **3**.



## Installing or Removing an Expansion Card

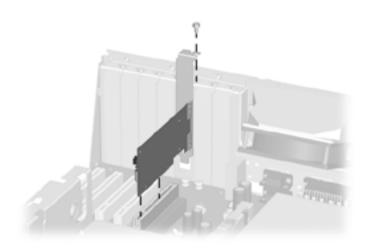
- 1. Shut down the operating system properly, then turn off the computer and any external devices, then disconnect the power cord from the power outlet.
- 2. Remove the access panel.

If installing an expansion card, skip to step 8.

- 3. To remove an expansion card, disconnect any cables attached to the expansion card.
- 4. Remove the screw at the top of the expansion slot.
- 5. Hold the card at each end and carefully rock it back and forth until the connectors pull free from the socket. Be sure not to scrape the card against other components.
- 6. Store the card in anti-static packaging.
- 7. Install an expansion slot cover or new expansion card to close the open slot.

If not installing an additional expansion card, skip to step 10.

- 8. Remove the expansion slot cover.
- 9. Slide the expansion card into the expansion socket and press it firmly into place.





When you install an expansion card, make sure you press firmly on the card so that the entire connector seats properly in the expansion card socket.

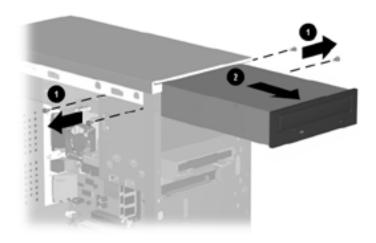
- 10. Replace the screw at the top of the expansion slot.
- 11. Replace the access panel.
- 12. Connect external cables to the installed card, if needed.

Reconfigure the computer, if necessary.

# Removing a 5.25 Inch Drive

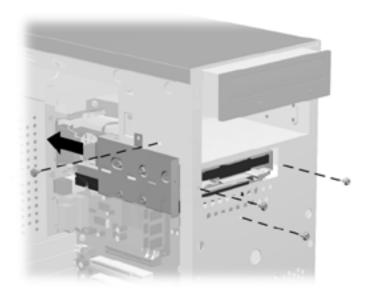
- 1. Shut down the operating system properly, then turn off the computer and any external devices, then disconnect the power cord from the power outlet.
- 2. Remove both access panels.
- 3. Remove the front bezel.
- 4. Disconnect the power, data, and audio cables, as necessary, from the back of the drive.

- 5. Remove the four screws, two from each side, that secure the drive in the drive cage.
- 6. Slide the drive out of the drive cage, as shown in the illustration below.



## Removing a Diskette Drive or Hard Drive

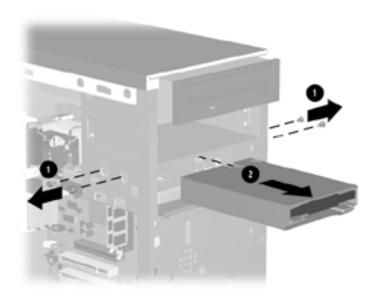
- 1. Shut down the operating system properly, then turn off the computer and any external devices, then disconnect the power cord from the power outlet.
- 2. Remove the left access panel.
- 3. Remove the front bezel.
- 4. Disconnect the power, data, and audio cables, as necessary, from the back of the drive.
- 5. Remove the four screws, 3 in the front and 1 on the side, that secure the drive cage to the chassis.



#### Removing the drive cage

6. Remove the drive cage from the chassis.

- 7. Remove the four screws, two from each side, that secure the drive in the drive cage ①.
- 8. Slide the drive out of the drive cage, as shown in the illustrations below **2**.



Removing the Diskette Drive



#### Removing the Hard Drive

To replace the drive cage, reverse steps 5-6.

# **Setup Utility (Intel Pentium 4 Models)**

# **Setup Utility**

Use Setup Utility to do the following:

- Change factory default settings.
- Set the system date and time.
- Set, view, change, or verify the system configuration, including settings for processor, graphics, memory, audio, storage, communications, and input devices.
- Modify the boot order of bootable devices such as hard drives, diskette drives, CD-ROM drives, DVD-ROM drives, or LS-120 drives.
- Enable Quick Boot, which is faster than Full Boot but does not run all of the diagnostic tests run during a Full Boot.



The BIOS family name and version number appear at the top of the Setup Utility menu for reference when placing service calls.

#### **Using Setup Utility**

To access the Setup Utility menu, complete the following steps:

- 1. Turn on or restart the computer. If you are in Windows, click **Start > Shut Down > Restart the Computer.**
- 2. When the Del = Setup message appears in the lower-right corner of the screen, press the **Delete** key.

If a second screen appears, follow the prompts to access the Setup Utility.



If you do not press the **Delete** key while the message is displayed, you must restart the computer again to access the utility.

- 3. Use the **Up** and **Down arrow** keys to highlight the item you want to change in the left portion of the screen. The available options for that item are listed on the right side of the screen.
- 4. Press the **Page Up** or **Page Down** key to select the desired option. An arrow shows each option as you select it.
- 5. When you are finished changing options, press the **Esc** key to return to the Main Menu.
- 6. To apply and save changes, select **Save Settings** and Exit from the Main Menu.
  - ☐ To save the configuration changes made with the Setup Utility, choose **Y** in the dialog box and press the **Enter** key. The system will restart.
  - ☐ Choose N or press the **Esc** key to return to the Main Menu without saving the current settings.
  - ☐ Choose the **Exit without Saving** option to exit the Setup Utility without saving any changes.



To change the color of the background screen, press the **F2** or **F3** key. To save your changes and exit the Setup Utility at any time, press the **F10** key.

# **Standard CMOS Setup Screen**

The Standard CMOS Setup Screen is used to change system time, date, and the hard disk type.

etup Screen
Description
Allows you to set system date.
Allows you to set system time (24 hour format).
Calculates size and capacity of floppy drive.
Calculates size and capacity of secondary floppy drive if installed.
Auto detects which hard drive is the primary master drive.
Auto detects which hard drive is the primary slave drive.
Auto detects which hard drive is the secondary master drive.
Auto detects which hard drive is the secondary slave drive.
Displays base memory size.
Displays installed memory size.

## **Advanced CMOS Setup Screen**

The Advanced CMOS Setup Screen is used to change the device order your system boots from, the password mode, and the amount of time before your system enters POST.

#### **Advanced CMOS Setup Screen**

Heading	Description
1st Boot Device	Specifies the boot order for all devices.
2nd Boot Device	Specifies the boot order for all devices.
3rd Boot Device	Specifies the boot order for all devices.
S.M.A.R.T. for Hard Disks	Allows Self-Monitoring, Analysis and Reporting Technology (S.M.A.R.T.) to work on your hard drive.
System Keyboard	Indicates the keyboard is present.
Password Check	Indicates the system will check for a password before the user can access the Setup Utility.
Post Mode	Allows you to choose Quick Boot, which is faster than Full Boot but does not run all of the diagnostic tests run during a FullBoot.
Post Delay Time (in seconds)	Allows you to set the amount of time the Setup Utility prompt (Del = Setup) appears when the computer boots. Full Boot mode must be enabled.
Quiet Mode	Determines if the CD-ROM drive will run in Quiet Mode.
System BIOS Cacheable	Enabled/Disabled
Support for Setup Utility op	tions may vary depending on your specific hardware configuration.

# **Advanced Chipset Setup Screen**

The Advanced Chipset Setup screen is used for configuring chipset features.

#### **Advanced Chipset Setup Screen**

Heading	Description
USB Controller	Enable/disable the function of the USB controller.
USB Device Legacy Support	Enable/disable support for legacy USB devices without driver support.
Support for Setup Utility	options may vary depending on your specific hardware configuration

# **Power Management Setup Screen**

The Power Management Setup screen is used to configure power management features.

Power Management Se	er Management Setup Screen	
Heading	Description	
ACPI Standby State	Enables the system to go into S1 or S3 standby state when computer is inactive for a certain period of time.	
Power Button Function	Power button configuration (on/off or sleep/wake) under APM-enabled operating systems.	
Restore On AC/Power Loss	s <b>Power Off</b> System will remain off when power is restored to the system, whether or not system was on or off when power was lost.	
	<b>Power On</b> System will boot to the operating system when power is restored to the system, whether or not system was on or off when power was lost.	
	<b>Last State</b> System will boot to the operating system or remain off when power is restored to the system, depending on the state of the system when power was lost.	
Resume On LAN Header	Enables/disables the system to be booted from another networked computer via the Wake-on-LAN feature.	
Resume on PME	PME (power management event) wakeup events (enable/disable).	
Support for Setup Utility op	tions may vary depending on your specific hardware configuration.	

# PCI/Plug and Play Setup Screen

The PCI/Plug and Play Setup screen is used to configure PCI plug and play features.

Heading	Description
Plug and Play Aware O/S	Enables/disables operating system to handle plug and play devices.
Clear NVRAM on Every Boot	Resets/does not reset Extended System Configuration Data (ESCD) when you exit Setup if you have installed a new add-on and the system reconfiguration has caused such a serious conflict that the operating system cannot boot.
Primary Graphics Adapter	Specifies whether a new installed video card is AGP or PCI.
PCI VGA Palette Snoop	Directs data read and written by the CPU to both the PCI VGA device's palette registers and the ISA VGA device palette registers, making the palette registers of both devices identical.

## **Peripheral Setup Screen**

The Peripheral Setup Screen is used to configure the settings for peripheral devices.

#### **Peripheral Setup Screen**

Heading	Description
OnBoard IDE	Specifies the settings for the IDE controller.
OnBoard LAN	Specifies the settings for the NIC controller.
LAN Chip Boot ROM	Allows the computer to boot from the NIC.
OnBoard AC' 97 Audio	Specifies the settings for the OnBoard sound.
OnBoard FDC	Specifies the settings for the diskette drive controller.
OnBoard Serial Port A	Specifies the settings for the COM 1 port controller.
OnBoard Serial Port B	Specifies the settings for the COM 2 port controller.
OnBoard Parallel Port	Specifies the settings for the parallel port controller.
<ul> <li>Parallel Port Mode</li> </ul>	Specifies the parallel port mode.
<ul> <li>Parallel Port IRQ</li> </ul>	Specifies the parallel port IRQ.
<ul> <li>Parallel Port DMA Channel</li> </ul>	Specifies the parallel port DMA Channel.
OnBoard Game Port	Specifies the settings for the OnBoard game port.
OnBoard Midi Port	Specifies the settings for the OnBoard Midi port.
<ul> <li>Midi IRQ Select</li> </ul>	Specifies the settings for the Midi IRQ.

Support for Setup Utility options may vary depending on your specific hardware configuration.

#### **Hardware Monitor Setup Screen**

The Hardware Monitor Setup screen reports the temperature of the hardware and components, including the following:

- CPU Ration selection
- CPU Temperature

- System Temperature
- CPU Fan Speed
- Chassis Fan Speed
- Vccp
- +1.5V
- **■** +1.8V
- +3.3V
- **■** +5.0V
- +12.0V
- HVCC (+3.3 VSB)

#### **Auto-Detect Hard Disks Screen**

The Auto-Detect Hard Disks screen is used to configure all hard disk parameters. This screen shows the standard settings that are shipped on the system.

If a new hard disk is installed, choosing the Auto-Detect option allows the system to detect and enter the correct settings for the new hard disk.

#### **Change User Password Screen**

The Change User Password screen is used to change the user password. The default setting is no password. Once a password is set, a user must enter the password to change parameters using the Setup Utility.



The supervisor password must be set to enable the use of a user password.

Enter the new user password in the dialog box, and then press the **Enter** key.

To remove or disable the set password, enter the current password, then press **Enter** when prompted to enter a new password.

#### **Change Supervisor Password Screen**

The Change Supervisor Password screen is used to change the supervisor password. The default setting is no password. Once a password is set, a user must enter the password to change parameters using the Setup Utility.

Enter the new supervisor password in the dialog box, and then press the **Enter** key.

To remove or disable the set password, enter the current password, then press **Enter** when prompted to enter a new password.



Clearing CMOS clears the Power-On Password. It does NOT clear the Supervisor Password.



You can configure the system to use the same password for both power up and Setup utility entry. To do this, use the Advanced CMOS Setup menu option, highlight **Password Check**, and then select the **Always** option.

Clearing passwords clears both the Supervisor and Power-On Passwords, but does not clear the Always option. To reset only the Supervisor Password, change **Always** to **Setup** on the Available Options list.

## **Auto Configuration with Optimal Settings Screen**

The Auto Configuration with Optimal Settings screen is used to load configuration settings that give the highest performance to the system. The system is shipped with these settings as the default. Use this option to return the system to optimal performance.

To load the high performance configuration settings, choose Y when prompted by the dialog box, and then press the **Enter** key.

#### Save Settings and Exit Screen

The Save Settings and Exit screen allows you to write all of the current settings to CMOS and exit the Setup Utility.

- To save the configuration changes made with the Setup Utility, choose **Y** in the dialog box and press the **Enter** key. The system will restart.
- Choose **N** or press the **Esc** key to return to the Main Menu without saving the current settings.
- Choose the **Exit without Saving** option to exit the Setup Utility without saving any changes.

#### **Exit Without Saving Screen**

The Exit Without Saving screen allows you to exit the Setup Utility without saving any changes made to any of the other configuration screens.

- To exit the utility without saving changes, choose **Y** and then press the **Enter** key.
- To save your changes and exit the utility, choose the **Save Settings and Exit** option from the Main Menu.

# **Setup Utility (Intel Celeron Models)**

# **Computer Setup Utilities (F10)**

Use Computer Setup to do the following:

- Change factory default settings.
- Set the system date and time.
- Set, view, change, or verify the system configuration, including settings for processor, graphics, memory, audio, storage, communications, and input devices.
- Modify the boot order of bootable devices such as hard drives, diskette drives, CD-ROM drives, DVD-ROM drives, or LS-120 drives.
- Configure Quiet Drive options (for drives that support this feature).
- Enable Quick Boot, which is faster than Full Boot but does not run all of the diagnostic tests run during a Full Boot.
- Enable or disable Network Server Mode, which allows the computer to boot the operating system when the power-on password is enabled, with or without a keyboard or mouse attached. When attached to the system, the keyboard and mouse remain locked until the power-on password is entered.
- Select Post Messages Enabled or Disabled to change the display status of Power-On Self-Test (POST) messages. Post Messages Disabled suppresses most POST messages, such as memory count, product name, and other non-error text messages. If a POST error occurs, the error is displayed regardless of the mode selected. To manually switch to Post Messages Enabled during POST, press any key (except F1 through F12).
- Establish an Ownership Tag, the text of which is displayed each time the system is turned on or restarted.

- Enter the Asset Tag or property identification number assigned by your company to this computer.
- Enable power-on password prompt during system restarts (warm boots) as well as during power-on.
- Establish a setup password that controls access to Computer Setup (**F10**) and the settings described in this section.
- Secure integrated I/O functionality, including the serial, USB, or parallel ports, audio, or embedded NIC, so that they cannot be used until they are unsecured.
- Enable or disable Master Boot Record (MBR) Security. Enable or disable removable media boot ability.
- Enable or disable removable media write ability.
- Solve system configuration errors detected but not automatically fixed during the Power-On Self-Test (POST).
- Replicate your system setup by saving system configuration information on diskette and restoring it on one or more computers.
- Execute self-tests on a specified IDE hard drive.
- Configure various energy-saving features including energy saver mode, system and hard drive timeouts, power button mode, and power LED behavior.

## **Using Computer Setup Utilities**

To access the Computer Setup Utilities menu, complete the following steps:

- Turn on or restart the computer. If you are in Windows, click Start > Shut Down > Restart the Computer.
- 2. When the F10 = Setup message appears in the lower-right corner of the screen, press the **F10** key.



If you do not press the **F10** key while the message is displayed, you must restart the computer again to access the utility.

- 3. Select your language from the list and press the **Enter** key.
- 4. A choice of five headings appears in the Computer Setup Utilities menu: File, Storage, Security, Power, and Advanced.
- 5. Use the arrow keys to select the appropriate heading and to select the option you want, then press the **Enter** key. To return to the Computer Setup Utilities menu, press the **Esc** key.
- 6. To apply and save changes, select **File > Save Changes and Exit.** 
  - ☐ If you selected an option that automatically restarted the computer, changes were applied at that time.
  - ☐ If you have made changes that you do not want applied, select **Ignore Changes and Exit.**
  - ☐ If you have already applied changes you now want to eliminate, select **Set Defaults and Exit.** This option will restore the original factory system defaults.

Computer	Setup
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Heading	Option	Description
File	System Information	Lists:
		Product name
		<ul> <li>Processor type/speed/stepping</li> </ul>
		Cache size (L1/L2)
		Installed memory size
		<ul> <li>System ROM (includes family name and version)</li> </ul>
		Chassis serial number
		Asset tracking number
		<ul> <li>Integrated MAC for embedded, enabled NIC (if applicable)</li> </ul>
	About	Displays copyright notice.
	Set Time and Date	Allows you to set system time and date.
	Save to Diskette	Saves system configuration, including CMOS, to a blank, formatted 1.44 MB diskette.
	Restore from Diskette	Restores system configuration, including CMOS, from a diskette.
	Set Defaults and Exit	Restores factory default settings, which includes clearing any established passwords.
	Ignore Changes andExit	Exits Computer Setup without applying or saving any changes.
	Save Changes and Exit	Saves changes to system configuration and exits Computer Setup.

Computer Setup (Continued)			
Heading	Option	Description	
Storage Device Configuration	device is selected,	orage devices. When a detailed information and ed. The following options	
		Diskette Type (For	legacy diskette drivesonly)
		accepted by the dis	st capacity media type kette drive. Options are 3.5 (B, 5.25" 1.2 MB, 5.25" 360 ed.
	<b>Drive Emulation</b> (Labeled drives only)	S-120 and ATAPI Zip	
		a storage device. (F	t a drive emulation type for For example, a Zip drive car by selecting disk emulation.
		Drive Type	<b>Emulation Options</b>
		IDE LS-120	None (treated as diskette drive)
			Disk (treated as hard drive)
		ATAPI Zip drive	None (treated as Other)
			Diskette (treated as diskette drive)
			Disk (treated as hard drive)

configuration.

Computer Setup (Continued)		
Heading	Option	Description
Storage Device Configuration (continued) (continued)	Transfer Mode (IDE devices only) Specifies the active data transfer mode. Options (subject to device capabilities) are PIO 0, Max PIO, Enhanced DMA, Ultra DMA 0, and Max UDMA	
		Multisector Transfers (IDE ATA devicesonly)
		Specifies how many sectors are transferred pe multi-sector PIO operation. Options (subject to device capabilities) are Disabled, 8, and 16.
		Quiet Drive (available on select drives only)
		<ul> <li>PerformanceAllows the drive to operate at maximum performance.</li> </ul>
		<ul> <li>QuietReduces noise from the drive during operation. When set to Quiet, the drive will not operate at maximum performance.</li> </ul>
		If the drive does not support Quiet mode, the Quiet Drive option will not be displayed.
		Translation Mode (IDE disks only)
		Lets you select the translation mode to be used for the device. This enables the BIOS to access disks partitioned and formatted on othe systems and may be necessary for users of older versions of UNIX (e.g., SCO UNIX version 3.2). Options are Bit-Shift, LBA Assisted, User, and None.

configuration.

Heading	Option	Description
Storage (continued)		CAUTION: Ordinarily, the translation mode selected automatically by the BIOS should not be changed. If the selected translation mode is not compatible with the translation mode that was active when the disk was partitioned and formatted, the data on the disk will be inaccessible.
		Translation Parameters (IDE Disks only)
		Allows you to specify the parameters (logical cylinders, heads, and sectors per track) used by the BIOS to translate disk I/O requests (fror the operating system or an application) into terms the hard drive can accept. Logical cylinders may not exceed 1024. The number of heads may not exceed 256. The number of sectors per track may not exceed 63. These fields are only visible and changeable when the drive translation mode is set to User.
	Options	Removable Media Boot
		Enables/disables ability to boot the system from removable media.
		After saving changes to Removable Media Boot, the computer will restart. Turn the computer off, then on, manually.
		Removable Media Write
		Enables/disables ability to write data to removable media.
		This feature applies only to legacy diskette, IDE LS-120 Superdisk, and IDEPD-CD drives.

configuration.

Computer Se	etup (Continued)	
Heading	Option	Description
Storage	Options	Primary IDE Controller
(continued)	(continued)	Allows you to enable or disable the primary IDE controller.
		Secondary IDE Controller
		Allows you to enable or disable the secondary IDE controller.
		Diskette MBR Validation
		Allows you to enable or disable strict validation of the diskette Master Boot Record(MBR).
		If you use a bootable diskette image that you know to be valid, and it does not boot with Diskette MBR Validation enabled, you may need to disable this option in order to use the diskette.
	IDE DPS Self-Test	Allows you to execute self-tests on IDE hard drives capable of performing the Drive Protection System (DPS) self-tests.
		This selection will only appear when at least one drive capable of performing the IDE DPS self-tests is attached to the system.
	Hard Drive Order (supported on select models only)	Allows you to specify the order of attached hard drive controllers. The first hard drive controller in the order will have priority in the boot sequence and will be recognized as drive C (if any devices are attached).
Support for Co configuration.	mputer Setup options may v	vary depending on your specific hardware

Heading Storage	Option	
(continued)	Boot Order	Allows you to specify the order in which attached peripheral devices (such as diskette drive, hard drive, CD-ROM, or network interface card) are checked for a bootable operating system image. Each device on the list may be individually excluded from or included for consideration as a bootable operating system source. For systems with more than one attached diskette or disk drive, a submenu allows you to specify the order in which the devices are assigned drive letters.
		MS-DOS drive lettering assignments may not apply after a non-MS-DOS operating system has started.
		To boot <b>one time</b> from a device other than the default device specified in Boot Order, restart the computer and press <b>F9</b> when the F10 = Setup message appears on the screen. When POST is completed, a list of bootable devices is displayed. Use the arrow keys to select a device and press the <b>Enter</b> key.
Security	Setup Password	Allows you to set and enable setup (administrator) password.
		If the setup password is set, it is required to change Computer Setup options, flash the ROM, and make changes to certain plug and play settings under Windows. Also, this password must be set in order to use some Compaq remote security tools.
	Power-On Password	Allows you to set and enable power-on password.

Computer Se	etup (Continued)	
Heading	Option	Description
Security (continued)	Device Security	Enables/disables Serial ports A and B, parallel ports, USB ports, system audio security, network controllers (some models), and SCSI controllers.
	Network Service Boot	Enables/disables the computer's ability to boot from an operating system installed on a network server. (Feature available on NIC models only; the network controller must reside on the PCI bus or be embedded on the system board.)
	System IDs	Allows you to set:
		<ul> <li>Asset tag (16-byte identifier) and ownership Tag (80-byte identifier displayed during POST)</li> </ul>
		<ul> <li>Chassis serial number or Universal Unique Identifier (UUID) number if current number is invalid (these ID numbers are normally set in the factory and are used to uniquely identify the system)</li> </ul>
		<ul> <li>Keyboard locale setting (e.g., English or German) for System ID entry</li> </ul>
	Password Options	Allows you to:
		<ul> <li>Enable/disable network server mode.</li> </ul>
		This selection will appear only if a power-on password is set.
		<ul> <li>Specify whether password is required for warm boot (CTRL+ALT+DEL).</li> </ul>
		This selection is available only when Network Server Mode is disabled.

Computer	Setup	(Continued)

Heading	Option	Description
Security (continued)	Master Boot Record Security*	Allows you to enable or disable Master Boot Record (MBR) Security.
		When enabled, the BIOS rejects all requests to write to the MBR on the current bootable disk. Each time the computer is powered on or rebooted, the BIOS compares the MBR of the current bootable disk to the previously-saved MBR. If changes are detected, you are given the option of saving the MBR on the current bootable disk, restoring the previously-saved MBR, or disabling MBR Security. You must know the setup password, if one is set.
		Disable MBR Security before intentionally changing the formatting or partitioning of the current bootable disk. Several disk utilities (such as FDISK and FORMAT) attempt to update the MBR. If MBR Security is enabled and disk accesses are being serviced by the BIOS, write requests to the MBR are rejected, causing the utilities to report errors. If MBR Security is enabled and disk accesses are being serviced by the operating system, any MBR change will be detected by the BIOS during the next reboot, and an MBR Security warning message will be displayed.

<sup>\*</sup>Option not supported on all products.

Computer Se	etup (Continued)	
Heading	Option	Description
Security (continued)	Save Master Boot Record*	Saves a backup copy of the Master Boot Record of the current bootable disk.
		Only appears if MBR Security is enabled.
	Restore Master Boot Record*	Restores the backup Master Boot Record to the current bootable disk.
		Only appears if all of the following conditions are true:
		<ul> <li>MBR Security is enabled.</li> </ul>
		<ul> <li>A backup copy of the MBR has been previously saved.</li> </ul>
		<ul> <li>The current bootable disk is the same disk from which the backup copy of the MBR was saved.</li> </ul>
		CAUTION: Restoring a previously saved MBR after a disk utility or the operating system has modified the MBR may cause the data on the disk to become inaccessible. Only restore a previously saved MBR if you are confident that the current bootable disk's MBR has been corrupted or infected with a virus.

\*Option not supported on all products.

Computer Setup (Continued)		
Heading	Option	Description
Power	Energy Saver	Allows you to set the energy saver mode (advanced, disable, or minimal).
		In the minimal energy saver mode setting, the hard drive and system do not go into energy saver mode, but the setting allows you to press the power button to suspend the system.
		This option does not affect power management for the ACPI-enabled operating systems.
	Timeouts	Allows you to disable or manually select timeout values for the system and/or all attached IDE hard drives.
		This option does not affect power management for the ACPI-enabled operating systems. This selection will only appear when energy saver mode is set to advanced.
	Energy Saver Options	Allows you to set:
		<ul> <li>Power button configuration (on/off or sleep/wake) under APM-enabled operating systems.</li> </ul>
		<ul> <li>Power LED blink in suspend mode (enable/disable).</li> </ul>
		Energy Saver Options will appear only if the energy saver mode is enabled. Thisoption does not apply under ACPIenabled operating systems.

Heading Option Advanced* Power-On Options	<b>Description</b> Allows you to set:
Advanced* Power-On Options	Allows you to set:
	<ul> <li>POST mode (QuickBoot, FullBoot, or FullBoot every 1-30 days)</li> </ul>
	<ul> <li>POST messages (enable/disable)</li> </ul>
	<ul> <li>Safe POST (enable/disable)</li> </ul>
	• F9 prompt (enable/disable)
	• F10 prompt (enable/disable)
	• F12 prompt (enable/disable)
	<ul> <li>Option ROM prompt (enable/disable)</li> </ul>
	<ul> <li>Remote wakeup boot sequence (remote server/local hard drive)</li> <li>Power Strip Control feature (off/on): After power loss, if you connect your computer to</li> </ul>
	an electric power strip, and would like to turn on power to the computer using the switch on the power strip, set this option to on.
	If you turn off power to your computer using the switch on a power strip, you will not be able to use the suspend/sleep feature or the Remote Management features.
	<ul> <li>UUID (Universal Unique Identifier) (enable/disable)</li> </ul>
	POST delay (in seconds)
	I/O APIC Mode
Onboard Devices	Allows you to set resources for or disable onboard system devices (diskette controller, serial port, parallel port).

<sup>\*</sup> These options should be used by advanced users only.

Computer Se	etup (Continued)	
Heading	Option	Description
Advanced* PCI Dev (continued)	PCI Devices	<ul> <li>Lists currently installed PCI devices and their IRQ settings.</li> </ul>
		<ul> <li>Allows you to reconfigure IRQ settings for these devices or to disable them entirely.</li> <li>These settings have no effect under an APIC-based operating system.</li> </ul>
	Bus Options	On select models, allows you to enable or disable:
	<ul> <li>PCI bus mastering, which allows a PCI device to take control of the PCI bus</li> </ul>	
		<ul> <li>PCI SERR# Generation.</li> </ul>
		<ul> <li>PCI VGA palette snooping, which sets the VGA palette snooping bit in PCI configuration space; this is only needed with more than one graphics controller installed.</li> </ul>
		<ul> <li>ECC support allows hardware based error correction for ECC capable memories.</li> </ul>

<sup>\*</sup> These options should be used by advanced users only.

Computer Setup (Continu	ued)
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Heading	Option	Description
Advanced* (continued)	Device Options	Allows you to set:
		<ul> <li>Printer mode (bi-directional, EPP &amp; ECP, output only).</li> </ul>
		<ul> <li>Num Lock state at power-on (off/on).</li> </ul>
		<ul> <li>PME (power management event) wakeup events (enable/disable).</li> </ul>
		<ul> <li>Processor cache (enable/disable).</li> </ul>
		<ul> <li>ACPI S3 support (enable/disable). S3 is an ACPI (advanced configuration and power interface) sleep state that some add-in hardware options may not support. Feature supported on select models only.</li> </ul>
		<ul> <li>ACPI S3 Video REPOST (enable/disable).</li> <li>This feature reruns the video option ROM on a boot from the S3 state.</li> </ul>

<sup>\*</sup> These options should be used by advanced users only.

Computer	Setup	(Continue	ed)
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Heading	Option	Description
Advanced* Device Options (continued) (continued)	Allows you to set:	
	(continued)	<ul> <li>ACPI S3 Hard Disk Reset (enable/disable).</li> <li>Resets the hard disk on a boot from the S3 sleep state.</li> </ul>
		<ul> <li>ACPI S3 PS2 Mouse Wake Up (enable/disable). Allows the mouse to wake the system from the S3 sleep state.</li> </ul>
	<ul> <li>AGP Aperture size (options vary depending on platform) allows you to specify the amount of system memory reserved for use by your graphics controller.</li> </ul>	
		<ul> <li>Monitor Tracking (enable/disable). Allows ROM to save monitor asset information.</li> </ul>
		<ul> <li>Processor Number (enable/disable) for Pentium III processors.</li> </ul>
	PCI VGA Configuration	Appears only if there are multiple PCI video adapters in the system. Allows users to specify which VGA controller will be the "boot" or primary VGA controller.

<sup>\*</sup> These options should be used by advanced users only.

# **Battery Replacement**

# Replacing the Battery

The battery that comes with your computer provides power to the real-time clock and has a lifetime of about three years. When replacing the battery, use an equivalent 3-volt lithium coin cell battery. A replacement battery may be purchased at your local retailer or from the Compag.com Web site.



The spare part number for a standard coin cell battery is 153099-001, which corresponds to a CR2032 battery or equivalent.



**WARNING:** Your computer contains an internal lithium manganese dioxide, vanadium pentoxide, or alkaline battery or battery pack. There is a risk of fire and burns if the battery pack is not handled properly. To reduce the risk of personal injury:

- Do not expose the battery to temperatures higher than 140° F (60° C).
- Do not disassemble, crush, puncture, short external contacts, or dispose of the battery in fire or water.
- Replace the battery only with the Compaq spare designated for this product.
- Do not attempt to recharge the battery.



**CAUTION:** Static electricity can damage the electronic components of the workstation or optional equipment. Before beginning these procedures, ensure that you are discharged of static electricity by briefly touching a grounded metal object.



Batteries, battery packs, and accumulators should not be disposed of together with the general household waste. To forward them to recycling or proper disposal, please use the public collection system or return them to Compaq, your authorized partners, or their agents.

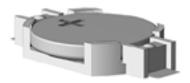
#### To replace the battery:

1. Shut down the operating system properly, turn off the computer and any external devices, disconnect the power cord from the electrical outlet, and remove the computer cover or access panel.



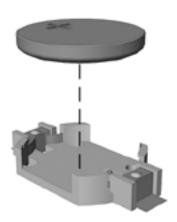
It may be necessary to remove an expansion card to gain access to the battery.

- 2. Locate the battery and battery holder on the system board, as shown in the following illustration.
- 3. Press the release latch to remove the battery.



Battery and battery holder

4. Lift the battery out of its holder.



#### Removing the coin cell battery

- 5. Slide the replacement battery into position, positive side up. The battery holder automatically secures the battery in the proper position.
- 6. Replace any expansion boards you removed.
- 7. Replace the computer cover or access panel.
- 8. Plug in and turn on the computer.
- 9. Reset the date and time, your passwords, and any special system setups, using Setup Utility. Refer to the "Setup Utility" appendix for additional information.

# Routine Computer Care and Shipping Preparation

# **Routine Computer Care**

Follow these suggestions to take care of your computer and monitor:

- Operate the computer on a sturdy, level surface. Leave a 3-inch (7.6-cm) clearance at the back of the system unit and above the monitor to permit the required airflow.
- Never operate the computer with the cover or side panel removed.
- Never restrict the airflow into the computer by blocking the front vents or air intake. Do not place the keyboard, with the keyboard feet down, directly against the front of the desktop unit as this also restricts airflow.
- Keep the computer away from excessive moisture, direct sunlight, and extremes of heat and cold.
- Keep liquids away from the computer and keyboard.
- Never cover the ventilation slots on the monitor with any type of material.
- Turn off the computer before you do either of the following:
  - ☐ Wipe the exterior of the computer with a soft, damp cloth as needed. Using cleaning products may discolor or damage the finish.
  - Occasionally clean the air vents on the front and back of the computer. Lint and other foreign matter can block the vents and limit the airflow.

#### **CD-ROM Drive Precautions**

Be sure to observe the following guidelines while operating or cleaning your CD-ROM drive.

## **Operation**

- Do not move the drive during operation. This may cause it to malfunction during reading.
- Avoid exposing the drive to sudden changes in temperature, as condensation may form inside the unit. If the temperature suddenly changes while the drive is on, wait at least one hour before you turn off the power. If you operate the unit immediately, it may malfunction while reading.
- Avoid placing the drive in a location that is subject to high humidity, extreme temperatures, mechanical vibration, or direct sunlight.

# **Cleaning**

- Clean the panel and controls with a soft, dry cloth or a soft cloth lightly moistened with a mild detergent solution. Never spray cleaning fluids directly on the unit.
- Avoid using any type of solvent, such as alcohol or benzene, which may damage the finish.

## **Safety**

If any object or liquid falls into the drive, immediately unplug the computer and have it checked by an authorized Compaq service provider.

# **Shipping Preparation**

Follow these suggestions when preparing to ship your computer:

1. Back up the hard drive files onto PD discs, tape cartridges, or diskettes. Be sure that the backup media is not exposed to electrical or magnetic impulses while stored or in transit.



The hard drive locks automatically when the system power is turned off.

- 2. Remove and store any program diskettes from the diskette drives.
- 3. Insert a blank diskette into the diskette drive to protect the drive while in transit. Do not use a diskette on which you have stored or plan to store data.
- 4. Turn off the computer and external devices.
- 5. Disconnect the power cord from the electrical outlet, then from the computer.
- 6. Disconnect the system components and external devices from their power sources, then from the computer.



Ensure that all boards are seated properly and secured in the board slots before shipping the computer.

Pack the system components and external devices in their original packing boxes or similar packaging with sufficient packing material to protect them.

# **Electrostatic Discharge**

A discharge of static electricity from a finger or other conductor may damage system boards or other static-sensitive devices. This type of damage may reduce the life expectancy of the device.

# **Preventing Electrostatic Damage**

To prevent electrostatic damage, observe the following precautions:

- Avoid hand contact by transporting and storing products in static-safe containers.
- Keep electrostatic-sensitive parts in their containers until they arrive at static-free workstations.
- Place parts on a grounded surface before removing them from their containers.
- Avoid touching pins, leads, or circuitry.
- Always be properly grounded when touching a static-sensitive component or assembly.

# **Grounding Methods**

There are several methods for grounding. Use one or more of the following methods when handling or installing electrostatic-sensitive parts:

- Use a wrist strap connected by a ground cord to a grounded workstation or computer chassis. Wrist straps are flexible straps with a minimum of 1 Megaohm +/- 10 percent resistance in the ground cords. To provide proper ground, wear the strap snug against the skin.
- Use heelstraps, toestraps, or bootstraps at standing workstations. Wear the straps on both feet when standing on conductive floors or dissipating floor mats.
- Use conductive field service tools.
- Use a portable field service kit with a folding static-dissipating work mat.

If you do not have any of the suggested equipment for proper grounding, contact your Compaq authorized dealer, reseller, or service provider.



For more information on static electricity, contact your Compaq authorized dealer, reseller, or service provider.

# **Power Cord Set Requirements**

The power supply for your product is provided with Automatic Line Switching (ALS). This feature allows the computer to operate on input voltages between 100–200V or 200–400V.

The power cord set (flexible cord or wall plug) received with this product meets the requirements for use in the country where you purchased the equipment.

If you need to obtain a power cord for a different country, you should purchase a power cord that is approved for use in that country.

The power cord must be rated for the product and for the voltage and current marked on the product's electrical ratings label. The voltage and current rating of the cord should be greater than the voltage and current rating marked on the product. In addition, the diameter of the wire must be a minimum of 0.75 mm² or 18AWG, and the length of the cord must be between 6 feet (1.8 m) and 12 feet (3.6 m). If you have questions about the type of power cord to use, contact your Compaq authorized service provider.

A power cord should be routed so that it is not likely to be walked on or pinched by items placed upon it or against it. Particular attention should be paid to the plug, electrical outlet, and the point where the cord exits from the product.

# **Agency Notices**

# **Regulatory Compliance Identification Numbers**

For the purpose of regulatory compliance certifications and identification, your product has been assigned a unique Compaq series number. The series number can be found on the product nameplate label, along with all required approval markings and information. When requesting compliance information for this product, always refer to this series number. The series number should not be confused with the marketing name or model number of the product.

## **Federal Communications Commission Notice**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

#### **Modifications**

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Compaq Computer Corporation may void the user's authority to operate the equipment.

## **Mouse Compliance Statement**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

#### **Cables**

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods in order to maintain compliance with FCC Rules and Regulations.

# Declaration of Conformity for Products Marked with the FCC Logo (United States only)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.

For questions regarding your product, contact:

Compaq Computer Corporation P. O. Box 692000, Mail Stop 530113 Houston, Texas 77269-2000

Or, call 1-800-652-6672 (1-800-OK COMPAQ).

For questions regarding this FCC declaration, contact:

Compaq Computer Corporation P. O. Box 692000, Mail Stop 510101 Houston, Texas 77269-2000

Or, call (281) 514-3333.

To identify this product, refer to the part, series, or model number found on the product.

#### **Canadian Notice**

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

#### **Avis Canadien**

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

# **European Union Notice**

Products with the CE Marking comply with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European Norms (the equivalent international standards are in brackets):

- EN55022 (CISPR 22)—Electromagnetic Interference
- EN55024 (IEC61000-4-2,3,4,5,6,8,11)—Electromagnetic Immunity
- EN61000-3-2 (IEC61000-3-2)—Power Line Harmonics
- EN61000-3-3 (IEC61000-3-3)—Power Line Flicker
- EN60950 (IEC950)—Product Safety

# **Japanese Notice**

この基準と、準限権制法記録は政権官自主規制度収益(VCC)の共和 に見づくの日の理論侵機の基準です。この基準と、完定設定が使用でしたと を目的としている。か、との基準とフジより、せいっとの心を吸ご記録して は用されるよ、受信等書きらき担当でといわあります。 - 電機器収益に強って、日の配う場合が、こうない。

# **Energy Star Compliance**

Compaq *Evo* Personal Computers and Compaq Workstations marked with the Energy Star Logo are compliant with the U.S.

Environmental Protection Agency (EPA) Energy Star Computers Program. The EPA Energy Star Logo does not imply endorsement by the EPA. As an Energy Star Partner, Compaq Computer Corporation has determined the products marked with the Energy Star Logo meet the Energy Star guidelines for energy efficiency. The Energy Star Computers Program was created by the EPA to promote energy efficiency and reduce air pollution through more energy-efficient equipment in homes, offices, and factories. Compaq products achieve this by reducing the power consumption when not being used.

The power management feature of your computer is compatible with any network operating system or environment that supports APM1.2. This means the users in those environments will not be disconnected from the network during the low-power operating state.

The Power Management feature, when used in conjunction with an external Energy Star compliant monitor, will support the power-down features of the monitor. The Power Management feature allows an external monitor to go into low-power mode when the energy save timeout occurs. To take advantage of this energy savings, the monitor Power Management feature has been preset to power down the monitor after 15 minutes of system inactivity.



**CAUTION:** Using the Energy Save Monitor feature with non-Energy Star compliant monitors may cause video distortion when the Energy Save timeout occurs.

# **German Ergonomics Notice**

Compaq Evo Desktops, when combined with Compaq Brand keyboards and monitors that bear the "GS" approval mark, meet the requirements of ZH 1/618 (German Safety Regulations for Display Work Places in the Office Sector). The installation guides included with the monitor provide configuration information.

# **Laser Safety**

All Compaq systems equipped with a laser device comply with safety standards, including International Electrotechnical Commission (IEC) 825. With specific regard to the laser, the equipment complies with laser product performance standards set by government agencies as a Class 1 laser product. The product does not emit hazardous light; the beam is totally enclosed during all modes of customer operation and maintenance.



**WARNING:** To reduce the risk of exposure to hazardous radiation:

- Do not try to open the laser device enclosure. There are no userserviceable components inside.
- Do not operate controls, make adjustments, or perform procedures to the laser device other than those specified herein.
- Allow only authorized Compaq service providers to repair the laser device.

#### **CDRH Regulations**

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration implemented regulations for laser products on August 2, 1976. These regulations apply to laser products manufactured from August 1, 1976. Compliance is mandatory for products marketed in the United States.

#### **Compliance with International Regulations**

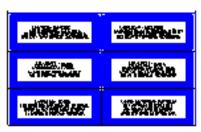
All Compaq systems equipped with CD-ROM drives comply with appropriate safety standards including IEC 825.

#### **Laser Product Label**

The following label or equivalent is located on the surface of Compaq laser products:



This label indicates that the product is classified as a CLASS 1 LASER PRODUCT. This label appears on a laser device installed in your product.



If you have an LS-120 drive or an LS-260 drive, this label is located next to the Class 1 Laser Product abel on your system.

#### **Laser Information**

■ Laser Type: Semiconductor GaAIAs

■ Wave Length: 780 +/- 35 nm

■ Divergence Angle: 53.5 Degrees +/- 0.5 degrees

■ Output Power: Less than 0.2 mW or  $10,869 \text{ W} \cdot \text{m}^{-2} \text{ sr}^{-1}$ 

■ Polarization: Circular 0.25

■ Numerical Aperture: 0.45 inches +/- 0.04 inches

## **Battery Replacement Notice**



**WARNING:** Your computer contains an internal lithium manganese dioxide, vanadium pentoxide, or alkaline battery or battery pack. There is risk of fire and burns if the battery pack is not handled properly. To reduce the risk of personal injury:

- Do not attempt to recharge the battery.
- Do not expose to temperatures higher than 60° C (140° F).
- Do not disassemble, crush, puncture, short external contacts, or dispose of in fire or water.
- Replace only with the Compaq spare designated for this product



Batteries, battery packs, and accumulators should not be disposed of together with the general household waste. In order to forward them to recycling or proper disposal, please use the public collection system or return them to Compaq, your authorized Compaq partners, or their agents.

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